UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

ARKANSAS TEACHER RETIREMENT SYSTEM,

Plaintiff,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al.,

Defendants.

Case No. 20 Civ. 5615 (KPF)

(caption continues on following pages)

STIPULATION AND ORDER REGARDING ESI PROTOCOL

RETIREMENT PROGRAM FOR EMPLOYEES OF THE TOWN OF FAIRFIELD, et al.,

Plaintiffs,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al., Defendants.

LEHIGH UNIVERSITY,

Plaintiff,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al., Defendants.

TEAMSTER MEMBERS RETIREMENT PLAN, et al.,

Plaintiff,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al., Defendants.

BLUE CROSS AND BLUE SHIELD ASSOCIATION NATIONAL EMPLOYEE BENEFITS COMMITTEE,

Plaintiff,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al., Defendants.

METROPOLITAN TRANSPORTATION AUTHORITY DEFINED BENEFIT PENSION PLAN MASTER TRUST, et al.,

Plaintiffs,

 \mathbf{V}

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al., Defendants.

No. 20 Civ. 5817 (KPF)

No. 20 Civ. 7061 (KPF)

No. 20 Civ. 7154 (KPF)

No. 20 Civ. 7606 (KPF)

No. 20 Civ. 7842 (KPF)

CHICAGO AREA I.B. OF T. PENSION PLAN & TRUST, et al.,

Plaintiffs,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al.,

Defendants.

THE EMPLOYES' RETIREMENT SYSTEM OF THE CITY OF MILWAUKEE,

Plaintiff,

v

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al.,

Defendants.

CHICAGO & VICINITY LABORERS DISTRICT COUNCIL PENSION FUND AND CHICAGO & VICINITY LABORERS DISTRICT COUNCIL HEALTH & WELFARE FUND, et al.,

Plaintiffs,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al.,

Defendants.

THE BOARDS OF TRUSTEES FOR THE CARPENTERS HEALTH AND SECURITY TRUST OF WESTERN WASHINGTON AND FOR THE GROUP INVESTMENT TRUST OF THE CARPENTERS INDIVIDUAL ACCOUNT PENSION TRUST OF WESTERN WASHINGTON, et al.,

Plaintiffs,

v.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al.,

Defendants.

No. 20 Civ. 7952 (KPF)

No. 20 Civ. 8642 (KPF)

No. 20 Civ. 9478 (KPF)

No. 20 Civ. 9479 (KPF)

UNITED FOOD & COMMERCIAL WORKERS UNIONS & EMPLOYERS MIDWEST PENSION FUND, AND ITS TRUSTEES,

No. 20 Civ. 9587 (KPF)

Plaintiffs,

V.

ALLIANZ GLOBAL INVESTORS U.S. LLC, et al.,

Defendants.

BOARD OF TRUSTEES OF THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS, LOCAL NO. 38 PENSION FUND PENSION PLAN,

Plaintiff,

v.

ALLIANZ GLOBAL INVESTORS U.S., LLC, ET AL.,

Defendants.

No. 20 Civ. 10028 (KPF)

The parties ("Parties") in the above-captioned actions ("Related Actions") have agreed to the terms of this Stipulation and [Proposed] Order Regarding ESI Protocol ("ESI Protocol") to govern the form of productions made by the Parties. Accordingly, it is ORDERED:

I. PURPOSE AND SCOPE

- A. **General.** Absent special circumstances, the specifications set forth in this ESI Protocol shall govern the production of all documents and electronically stored information ("ESI") by the Parties during discovery in the Related Actions.
- B. Scope. Nothing in this ESI Protocol is intended to be an exhaustive list of discovery obligations or rights of a Party producing discoverable information ("Producing Party") or a Party requesting discoverable information ("Requesting Party"), or any other Party or nonparty. To the extent additional obligations or rights not addressed in this ESI Protocol arise under the Federal Rules of Civil Procedure, local rules, or applicable state and federal statutes, they shall be controlling. The Parties will continue to meet and confer regarding any issues as necessary and appropriate, including agreeing to modify any of the dates and time-frames set forth in this ESI Protocol. This ESI Protocol does not address or resolve any objections to the scope of the Parties' respective discovery requests. This ESI Protocol also does not govern the reproduction by the Parties of discoverable information obtained from nonparties prior to or during discovery in the Related Actions; such information shall be reproduced by the Parties as it was produced to the Parties. The re-production of discoverable information previously produced by the Parties to third-parties is governed by Section IV.P, below.
- C. **Limitation and Non-Waiver.** The Parties and their attorneys do not intend by agreeing to this ESI Protocol to waive their rights to any protection or privilege, including the attorney-client privilege and work product doctrine, or their rights to object to any discovery requests.

D. **Variations.** In light of the varying and disparate data systems and architectures employed by the Parties, variations from this ESI Protocol may be required. In the event that any Party identifies a circumstance where application of this ESI Protocol is not technologically possible or practicable, the Producing Party will disclose to the Requesting Party the reason(s) for, and circumstances surrounding, the need to vary from this ESI Protocol, and the Parties will meet and confer in an effort to reach agreement on an appropriate deviation from this ESI Protocol. In the event that the Parties cannot reach agreement, the matter may be submitted to the Court for determination.

II. PRODUCTION OF HARD COPY DOCUMENTS

A. TIFFs. Hard copy documents should be produced in the form of single-page, Group IV TIFFs at 300 dpi. Each TIFF image should be named as its corresponding Bates number with a ".tif" extension. Original document orientation should be maintained (i.e., portrait to portrait and landscape to landscape). Bates numbers, confidentiality designations, and redactions should be burned into the TIFF image files. TIFF image files should be provided in a self-identified "Images" folder. The documents should be logically unitized (i.e., distinct documents shall not be merged into a single record, and single documents shall not be split into multiple records) and be produced in the order in which they are kept in the usual course of business. If an original document contains color that is necessary to understand the meaning or content of the document, upon request, the document shall be produced as single-page, 300 DPI, color JPG images.

B. OCR Text Files. Optical Character Recognition ("OCR") text files shall be provided as a single text file for each document, not one text file per page. Each file should be named with the beginning Bates number that is assigned to its corresponding document, followed by .TXT. OCR text files should be provided in a self-identified "Text" folder. To the extent a document is redacted, OCR text files for such a document shall not contain text for redacted portions. The settings to achieve the highest quality text, such as "auto-deskewing" and "auto-rotation," should be turned on during the OCR process.

Database Load Files/Cross-Reference Files. The documents should be provided C. with Concordance-compatible image and data load files (i.e., .OPT and .DAT files) using standard Concordance delimiters. The standard Concordance data load file delimiters are defined as using ASCII 094 or caret for a field separator, ASCII 124 or pipe for a text qualifier, and ASCII 013 or carriage return for a new line. The standard Concordance image load file shall provide the image file path for each the following Bates numbered page in "Bates, Volume, PATH to image, Document Break, Folder Break, Box Break, Total Pages" format:

Concordance-compatible image and data load files (i.e., .OPT and .DAT files) should be provided in a self-identified "Data" folder.

D. **Coding Fields.** The documents should be produced with at least the following searchable information in accompanying delimited data files: (1) FirstBates; (2) LastBates; (3) BegAttach; (4) EndAttach; (5) Pages; (6) Volume; and (7) Custodian. Custodians should be identified using the convention "last name_first name." Entity/departmental custodians should be

identified with a description of the entity or department. A Producing Party shall use a uniform description of a particular custodian across productions.

E. **Bates Numbering.** Each TIFF image should be assigned a Bates number that: (1) is unique across the entire document production; (2) maintains a constant length across the entire production (i.e., padded to the same number of characters); (3) contains no special characters or embedded spaces; and (4) is sequential within a given document. If a Bates number or set of Bates numbers is skipped in a production, the Producing Party will so note in a cover letter or production log accompanying the production.

III. IDENTIFICATION AND COLLECTION OF ESI

- A. **Sources, Search Methods, and Timing:** The Parties shall meet and confer in good faith in an effort to agree upon: (a) sources from which documents and ESI will be collected for review and production; (b) search methods and terms or other filtering or categorization to be applied; and (c) timeframes for collection and review of documents and ESI. These discussions should begin promptly after service of responses and objections to requests for production, and should continue as necessary to address issues that arise in the course of discovery. If good faith negotiations do not resolve all ESI questions, the parties will bring any remaining disputes to the Court for resolution.
- B. **Filtering and Culling:** The Parties agree to the following approaches to filtering or culling of ESI;
 - 1. <u>De-duplication</u>: The Parties shall use commercially acceptable methods (e.g., MD5 or SHA-1 hash values) to identify duplicate ESI and globally deduplicate ESI. In the case of emails, the hash value shall be calculated on the concatenated value of the following fields: to, from, cc, bcc, date sent, email subject, and full body of the email; additionally, at a Party's option, the fields upon

which hash values may be calculated may also include the Internet Message ID, Sent Date/Time and attachment count fields. In the case of mobile devices, duplicates on a custodial level may be identified using the following fields: Sent Date/Time, To, From, and Message Body. Normalization on the From and To data to account for formatting differences across devices may also be performed. Family groups (e.g., an email and its attachments) shall be de-duplicated only against other family groups as entities (e.g., using hash values calculated on concatenations of the hash values of all family members), and no document that is not part of a family group shall be de-duplicated against a member of a family group. The Parties may also, at each Party's option, use commercially acceptable methods of e-mail thread suppression. The metadata provided by the Parties for the produced version of each document withheld as a duplicate, shall include an "All Custodians" field, identifying all custodians who possessed exact copies of the document. The Parties will not de-duplicate loose electronic documents against email attachments. The Parties will not treat a document containing handwritten notes, highlighting, or any other markings as a duplicate of a non-marked or annotated version of the same document.

2. <u>De-NISTing</u>: Electronic files will be De-NISTed, removing commercially available operating system and application file information contained on the current NIST file list. If a Producing Party proposes to apply additional filters that identify common system files, nonuser generated files, and/or zero-byte file (i.e. computer files containing no data), the Producing Party will provide details to the Parties regarding the filters, how they work, and what impact (if any) they will have on the

collections or productions. No later than seven (7) days after such disclosure, the Parties will meet and confer in an effort to reach agreement on any additional filters. In the event that the Parties cannot reach agreement, the matter may be submitted to the Court for determination.

- 3. <u>Relevant Time Frame/Date</u>: The Parties may limit processing of Documents to that which was created, modified, sent, or received between certain dates as agreed by the Parties, or set forth by the Court.
- C. **Technologies**. To the extent a Party chooses to search and review using a technology or methodology other than search terms (including, for instance, predictive coding), that Party shall disclose its intent to use that technology and the name of the review tool. However, the Party need not share the intricacies of said methodology unless and until there is a good faith allegation of a violation of Rule 26.

IV. PRODUCTION OF ESI

Compliance with the procedures set forth below shall constitute compliance with Federal Rule of Civil Procedure 34(b)(2)(E).

A. Form of Production. Except as otherwise provided in this paragraph, production of all non-redacted ESI shall include single-page Bates-stamped TIFF images, and accompanied by a load file with fielded data, a .txt file containing extracted text or OCR Text, and an image load file for the TIFFs. The parties will produce non-redacted Excel and/or CSV spreadsheets and audio recordings in native form (to the extent such files are possessed by the producing party in native form), with one-page placeholder TIFF images as set forth in Section IV.D below. Redacted ESI must either be produced as TIFF images, accompanied by a load file with fielded data, a .txt file containing OCR'ed text, and an image load file for the TIFFs, or in native form with any redactions applied in native form. To the extent that a Receiving Party's review and/or use of

specifically identified Excel and/or CSV spreadsheets produced in redacted TIFF format is impeded by the format of the document, upon request of the Receiving Party, the Parties will meet and confer to discuss a reasonable alternative format for the specifically identified Excel and/or CSV files only. Any portions of audio files not claimed to be privileged or otherwise exempt from production in their entirety shall be produced in their native format. The parties will meet and confer to discuss a suitable production format for any document types not addressed herein.

- B. **Document Image Format.** Except as otherwise provided, all images must be produced as single-page, Group IV, 300 DPI TIFFs. Upon written request by the Requesting Party, the Producing Party shall take good faith measures to honor requests to produce color images where the Requesting Party believes in good faith that color is important to interpret the document. The Parties agree to meet and confer concerning any disputes over such requests.
- C. **E-Mail Attachments.** E-mail and attachments will be produced according to the specifications in subparagraph V.A, above. If the Producing Party redacts any part of the e-mail before producing it, OCR text may be provided in place of extracted text. E-mail attachments shall be processed as though they were separate documents, and the Data Load File shall include a field in which the Producing Party shall identify, for each e-mail, the Bates range of any attachments.

- D. Native Files. Native files will be produced in a separate folder on the production media. The Data Load File shall contain a field that identifies the file path of the native file corresponding to each document. For non-redacted Excel and/or CSV spreadsheets and audio recordings, the TIFF image shall be a one-page placeholder that shows (a) the name of the native file, (b) a unique Bates number, and (c) if applicable, a confidentiality designation. A Requesting Party shall exercise good faith efforts to ensure that any copies or print-outs of natively produced documents include a confidentiality legend that matches the confidentiality designation the Producing Party applied to the document.
- E. **Embedded Files.** With the exception of image files embedded in emails and not produced separately, embedded files shall be treated as though they were separate files, except that the Bates range of the parent document and the documents embedded therein shall be identified in the same manner as the Bates range of an e-mail attachment. Nothing in this provision obligates a Party to produce non-responsive embedded files as separate files.
- F. **Text Files.** For each document, a single text file shall be provided along with the image files and the metadata discussed in Section V.K. The text file name shall be the same as the Bates number of the first page of the document. File names shall not have any special characters or embedded spaces. Electronic text must be extracted directly from the native electronic file unless the document requires redaction, is an image file, or is any other native electronic file that does not contain text to extract (e.g., non-searchable PDFs). In these instances, a text file shall be created using OCR and shall be produced in lieu of extracted text. Extracted text shall be provided in UTF-8 text format.

- G. **Redactions**. In situations where redaction of information is required, such redactions must be made in a way that ensures the integrity of the remaining text is preserved for OCR (e.g., redactions must not obscure non-redacted text). Any redactions must be clearly visible on the face of the produced document (e.g., the Parties should not use white boxes to make redactions on documents with a white background) and OCR searchable (e.g., labeled "Redacted").
- H. **Document Unitization.** For files produced as TIFF images, each page of a document shall be electronically saved as an image file. If a document consists of more than one page, the unitization of the document and any attachments shall be maintained as it existed in the original when creating the image files. The Parties shall produce a unitization file ("load file") for all produced documents in accordance with the following formatting:

OCR and Extracted Text Files (.TXT Files):

- Single text file per document containing all of the document's pages
- Filenames should be of the form: <Bates num>.txt Where <Bates num> is the BATES number of the first page in the document.
- Text must be encoded in UTF-8.

Image Files:

- Single page per image
- TIFF is Group IV compression, 300 dpi unless color or grayscale image is necessary, then .JPG would be acceptable
- Filenames should be of the form: "<Bates num>.<ext>," where <Bates num> is the BATES number of the page, and <ext> is the appropriate extension for the image format (.jpg, .tif).

Index Files:

- "Concordance Default" delimited text file utilizing the following characters:
 - \circ The "comma" delimiter is "¶" (020)
 - o The "quote" delimiter is "b" (254)
 - o The "new line" delimiter is "\mathbb{R}" (174)
- First line must contain the column/field names (set forth in Appendix A)

- Every row must have the same number of columns/fields (empty values are acceptable)
- Text must be encoded in UTF-8

The Parties agree to meet and confer to discuss all unitization file/load file specifications, if needed.

I. Bates Numbering and Other Unique Identifiers. For files produced as TIFF images, each page of a produced document shall have a legible, unique page identifier ("Bates Number") electronically burned onto the TIFF image in such a manner that information from the source document is not obliterated, concealed, or interfered with. There shall be no other legend or stamp placed on the document image unless a document (i) qualifies for confidential treatment pursuant to a protective order issued by the Court in the Related Actions, or (ii) has been redacted in accordance with applicable law or order (including any protective order) entered by this Court or any other court. In the case of Confidential Information or Highly Confidential Information, as defined in any applicable protective order, or materials redacted in accordance with applicable law or other order (including any protective order) entered by this Court or another court, a designation may be burned onto the document's image at a location that does not obliterate or obscure any non-redacted information from the source document. If a Bates number or set of Bates numbers is skipped in a production, the producing party will so note in a cover letter or production log accompanying the production.

- J. **Production Media.** Documents shall be produced on CD-ROM, DVD, USB Flash drive, external hard drive (with standard PC-compatible interface), or such other readily accessible computer or electronic media or via FTP as the Parties may hereafter agree upon (the "Production Media"). The Parties shall accompany all document productions with a letter identifying the production date and the Bates number range of the materials contained on such Production Media. The production media should be labeled with:
 - the producing party's name;
 - the case name and number;
 - the production volume; and
 - the Bates number range.
- K. Metadata. With each produced ESI file, the Parties must produce each of the applicable metadata fields described in Appendix A (to the extent available and technically achievable). The metadata must be produced in the following format: (1) an OpticonTM or IPRO® "cross reference file" which associates each Bates number with its corresponding single-page TIFF image file and (2) a Data Load File containing Concordance® delimited text that will populate fields in a searchable flat database environment, containing one line for each document and each of the applicable fields as described in Appendix A. Nothing in this stipulation requires a Party to manually populate a metadata field in Appendix A (other than Custodian and MD5Hash) if such fields cannot be extracted from a document, provided that the Parties agree to comply with reasonable requests for metadata that cannot be extracted from a document. For the avoidance of doubt, nothing in this ESI Protocol shall act as a waiver of any objections that may exist to the production of such data.

- L. **Attachments.** Attachments must be mapped to their parent by the Attachment Range. If a parent email or one of its attachments is produced, all members of its family, except for privileged documents, and associated text and metadata, must be produced.
- M. Structured or Aggregated data Databases, Enterprise Systems, and Third-Party Cloud Systems. Consistent with the Parties' obligations under the Federal Rules of Civil Procedure, to the extent called for by any discovery request, the Producing Party(ies) will promptly alert the Requesting Party(ies) and meet and confer to address the identification, production, and production format of any responsive data contained in a database, other structured or aggregated data source, or third-party cloud-based storage system, including in connection with any trading, risk analysis, or similar platform. Prior to any such meet and confer, the Producing Party(ies) will provide sufficient information to enable the Requesting Party(ies) to evaluate the Producing Party's proposed method and format of production. In the event that the Parties cannot reach agreement, the matter may be submitted to the Court for determination.
- N. **Mobile and Handheld Device Documents and Data.** The Parties will meet and confer to address the preservation identification, production, and production format of any responsive documents and data contained on any mobile or handheld devices used by the custodian to communicate about or in connection with matters concerning the respective Related Action(s), including responsive email, documents, application data, text files, voice mail, audio files, other text-based and image-based information and messages contained on such devices. In the event that the Parties cannot reach agreement, the matter may be submitted to the Court for determination.
- O. **Hidden Data.** The Parties shall process productions in a manner to ensure that the all information, to the extent it exists in a document being produced in TIFF image format, is visible, including:

- auto date (code information should be provided in place of date);
- track changes (absent special circumstances, the TIFF images should show all track changes in markup form);
- hidden columns or rows (noting that hidden columns and/or rows exist in native excel files will be sufficient);
- hidden text or worksheets;
- hidden slides or speaker notes in native PowerPoint presentations; and
- comments (these should be visible on the TIFF images of the documents).
- P. **Prior Productions**. Notwithstanding the above, documents previously produced to a third-party in any other proceeding, investigation or inquiry concerning the subject matter of the Related Actions and already formatted for production can be produced in the manner they were previously produced to the third-party (although also Bates stamped for production in this case and with the addition of confidentiality designations, as appropriate, pursuant to the protective order in the Related Actions). The producing party shall also provide any information concerning production formatting and/or specifications to the extent needed by the Requesting party to process, use or interpret the previously produced documents.

V. ENCRYPTION

To maximize the security of information in transit, any media on which documents are produced may be encrypted by the Producing Party and transmit the encryption key or password to the Receiving Party(ies) under separate cover.

VI. EXCEPTION FILES

The Parties will use reasonable efforts and standard industry practices to address Documents that present imaging or form production problems (including encrypted and/or protected files identified during the processing of ESI) ("Exception Files"). At least 90 days before substantial completion of document productions, the Parties will meet and confer regarding the volume of Exception Files and procedures that will be used to identify, access, and process Exception Files. In the event that the Parties cannot reach agreement on the handling of Exception Files through the meet and confer process, the matter may be submitted to the Court for determination.

VII. CONFIDENTIALITY

Confidentiality of documents produced will be designated in accordance with the protective order and any other applicable orders entered in the Related Actions.

VIII. PRIVILEGE LOGS

- A. Except as otherwise provided in this Section, a Producing Party shall provide a log or logs of documents the Producing Party has withheld from Production or produced in redacted form on the grounds that such documents constitute or contain information protected from disclosure under the attorney-client privilege, the work product immunity, domestic or foreign privacy or data protection laws or regulations, or any other privilege or protection afforded or recognized by Rule 26 of the Federal Rules of Civil Procedure or Rule 501 of the Federal Rules of Evidence, including any such privilege or protection under applicable U.S. or foreign law, regulation, or statute ("Privileged Material").
 - B. Despite the foregoing, the following materials presumptively need not be logged:
 - 1. Communications on or after the date that the Producing Party first filed or was served with a complaint in any of the Related Actions exclusively within a law firm or exclusively between or among law firms, serving as the Party's outside counsel of record in the Related Action, as well as their employees and support staff;

- 2. Attorney work product created on or after the date that the Producing Party first filed or was served with a complaint in any of the Related Actions by the Party's outside counsel, including their respective employees and support staff;
- 3. Communications between and among a Party's outside counsel of record in the Related Action(s) and their experts or professional vendors (including their employees and support staff), and work product created by such experts or professional vendors;

Notwithstanding the foregoing, communications and work product claimed to be Privileged Material must be logged to the extent they were sent or distributed to a person other than a Party, the Party's outside counsel (including their employees and support staff), or the Party's experts or professional vendors (including their employees and support staff) retained for the purpose of assisting counsel in the Related Action(s).

- C. The Parties will endeavor to provide a privilege log in Excel format that complies with Rule 26 of the Federal Rules of Civil Procedure of any documents withheld in whole or in part (i.e., redacted) based upon a claim of privilege within 60 days after production. The parties further agree to meet and confer regarding the production of a privilege log prior to any deposition(s), as necessary. For each document withheld or redacted, the privilege log shall contain the following information:
 - 1. A fixed sequential index/reference number, the sequence of which shall continue in subsequent logs;
 - 2. Bates number for documents withheld in part (i.e., redacted);

3. the document type (e.g., e-mail, Word Document, etc.) and for any documents that include attachments, an indication that the document has attachments:

4. If the document is an email:

- (a) the sent date and time of the email (populated with metadata extracted from the "Date" and "Time" fields);
- (b) the sender (populated with metadata extracted from the "Email From" field);
- (c) the recipient(s) (populated with separate columns with metadata extracted from each of the "Email To," the "Email CC" and "Email BCC" fields); and
- (d) the subject line of the e-mail (unless the subject line itself contains privileged information) (populated with metadata extracted from the "Subject" field).

5. For loose ESI:

- (a) the author (populated with metadata extracted from the "Author" field);
- (b) the date (populated with metadata extracted from the "Last Modified" field); and
- (c) the file name (unless the file name contains privileged information) (populated with metadata extracted from the "File Name" field);
- 6. a notation identifying any legal personnel (and their affiliation to the extent they are not in-house counsel);
- 7. a description of the document sufficient to allow the Requesting Party to understand the subject matter of the document and the basis of the claim of privilege or protection; and
- 8. the basis of the privilege claimed: (a) AC for Attorney/Client, (b) WP for Attorney Work Product, (c) CI for Common Interest; and/or (d) OT for Other.

IX. NON-PARTY DOCUMENTS

A. A Party in a Related Action that issues a subpoena to a non-party to that Related Action ("Issuing Party") is responsible for producing to all other Parties to that Related Action any documents obtained pursuant to that subpoena in the form in which they were produced to the Issuing Party. To the extent practical given the data volume, productions by a non-party should be produced by the Issuing Party to all other Parties to that Related Action within fourteen (14) calendar days of the receipt by the Issuing Party.

IT IS SO STIPULATED, THROUGH COUNSEL OF RECORD.

DATED: December 21, 2020.

/s/ Michael Blatchley

Hannah Ross Avi Josefson James Harrod Michael Blatchley BERNSTEIN LITOWITZ BERGER

& GROSSMANN LLP

1251 Avenue of the Americas New York, NY 10020

Telephone: (212) 554-1400 Facsimile: (212) 554-1444

Co-Counsel for Plaintiff Arkansas Teacher

Retirement System

Counsel for Plaintiff Employees' Retirement System of the City of Milwaukee; Chicago & Vicinity Laborers' District Council Pension Fund and the Chicago & Vicinity Laborers' District Council Health & Welfare Fund, and Catherine Wenskus, Administrator; The Boards of Trustees for the Carpenters Health and Security Trust of Western Washington and for the Group Investment Trust of the Carpenters Individual Account Pension Trust of Western Washington and Carpenters Retirement Trust of Western Washington /s/ Robert J. Giuffra, Jr.

Robert J. Giuffra, Jr.
Stephanie G. Wheeler
Kathleen Suzanne McArthur
Ann-Elizabeth Ostrager
Hilary M. Williams

SULLIVAN & CROMWELL LLP

125 Broad Street

New York, New York 10004-2468

Telephone: (212) 558-4000 Facsimile: (212) 558-3588

Counsel for Defendant Allianz Global

Investors U.S. LLC

/s/ Robert A. Skinner

Robert A. Skinner
Amy D. Roy
Mary Elizabeth Brust
Cole A. Goodman
ROPES & GRAY LLP
Prudential Tower
800 Boylston

/s/ Frederic S. Fox

Fredric S. Fox Donald R. Hall Melinda Campbell Aaron Schwartz

KAPLAN FOX & KILSHEIMER LLP

850 Third Avenue, 14th Floor New York, NY 10022

Telephone: (212) 687-1980 Facsimile: (212) 687-7714

Co-Counsel for Plaintiff Arkansas Teacher Retirement System

Co-Counsel for Plaintiffs Chicago Area I.B of T. Pension Plan & Trust and Local 703 I.B. of T., Grocery and Food Employees' Pension Plan & Trust

/s/ David S. Golub

David S. Golub Steven L. Bloch Ian W. Sloss SILVER GOLUB & TEITELL LLP 184 Atlantic Street Stamford, CT 06901 Telephone: (203) 325-4491

Facsimile: (203) 325-3769

Counsel for Plaintiffs Retirement Program for Employees of the Town of Fairfield, Retirement Program for Fairfield Police and Firemen's Retirement System, and the Board of Trustees of the New England Health Care Employees Pension Fund, and New England Health Care Employees Pension Fund

Boston, MA 02199

Telephone: (617) 951-7000 Facsimile: (617) 951-7050

Co-Counsel for Defendant Allianz Global

Investors U.S. LLC

/s/ Richard Werder

Richard Werder Michael Liftik Renita Sharma Andrew Marks

QUINN EMANUEL URQUHART

SULLIVAN LLP 51 Madison Avenue 22nd Floor

New York, NY 10010 Telephone: (212) 849-7000 Facsimile: (212)-849-7100

Counsel for Defendant Aon Investments USA Inc. f/k/a Aon Hewitt Investment Consulting, Inc.

/s/ Andrew L. Margulis

Andrew L. Margulis ROPERS MAJESKI PC 750 Third Avenue, 25th Floor

New York, NY 10017 Telephone: (212) 668-5927 Facsimile: (212) 668-5929

Counsel for Defendant Steadfast Insurance

Company

/s/ Jonathan L. Hochman

Jonathan L. Hochman

Matthew A. Katz

Jenny C. Gu

SCHINDLER COHEN & HOCHMAN LLP

100 Wall Street, 15th Floor

New York, NY 10005

Telephone: (212) 277-6300 Facsimile: (212) 277-6333

Counsel for Plaintiff Lehigh University

/s/ William C. Fredericks

William C. Fredericks

Donald A. Broggi

Zachary M. Vaughan

SCOTT + SCOTT ATTORNEYS AT LAW

LLP

The Helmsley Building

230 Park Avenue, 17th Floor

New York, NY 10169

Telephone: (212) 223-6444

Facsimile: (212) 223-6334

Counsel for Plaintiffs Teamster Members Retirement Plan f/k/a GCIU Inter-Local Pension Plan and Bricklayers and Masons' Local Union No. 5, Ohio Pension Fund

/s/ Daniel Z. Goldman

Daniel Z. Goldman

PETRILLO KLEIN & BOXER LLP

655 Third Avenue, 22nd Floor

New York, NY 10017

Telephone: (212) 370-0330

/s/ Sean W. Gallagher

Sean W. Gallagher

Adam L. Hoeflich

Mark S. Ouweleen

Abby M. Mollen

Nicolas L. Martinez

BARTLIT BECK LLP

54 West Hubbard Street, Suite 300

Chicago, IL 60654

Telephone: (312) 494-4400

/s/ Anthony F. Shelley

Anthony F. Shelley
MILLER & CHEVALIER CHARTERED
900 Sixteenth Street N.W.
Black Lives Matter Plaza
Washington, DC 20006
Telephone: (202) 626-5924

Counsel for Plaintiff Blue Cross and Blue Shield Association National Employee Benefits Committee

/s/ Javier Bleichmar

Javier Bleichmar George N. Bauer BLEICHMAR FONTI & AULD LLP 7 Times Square, 27th Floor New York, New York 10036 Telephone: (212) 789-1340 Facsimile: (212) 205-3960

Counsel for Plaintiffs Metropolitan Transportation Authority Defined Benefit Pension Plan Master Trust, Manhattan and Bronx Surface Transit Operating Authority Pension Plan, and Metropolitan Transportation Authority Other Postemployment Benefit Plan; and the Board of Trustees of the International Brotherhood of Electrical Workers, Local No. 38 Pension Fund Pension Plan

/s/ Regina Calcaterra

Regina Calcaterra Justin Teres CALCATERRA POLLACK LLP 1140 Avenue of the Americas, 9th Floor New York, New York 10036 Telephone: (212) 899-1760 Counsel for Plaintiffs Metropolitan Transportation Authority Defined Benefit Pension Plan Master Trust, Manhattan and Bronx Surface Transit Operating Authority Pension Plan, and Metropolitan Transportation Authority Other Postemployment Benefit Plan

/s/ Scott F. Hessell

Scott F. Hessell John Bjork Ashima Talwar Sperling & Slater, P.C. 55 West Monroe Street, Suite 3200 Chicago, Illinois 60603 Telephone: (312) 641-3200

Co-Counsel for Plaintiffs Chicago Area I.B of T. Pension Plan & Trust and Local 703 I.B. of T., Grocery and Food Employees' Pension Plan & Trust

/s/ Justin S. Brooks

Justin S. Brooks Elizabeth H. Shofner Reuben A. Guttman GUTTMAN, BUSCHNER & BROOKS PLLC 119 Coulter Ave., Suite 211 Ardmore, PA 19003

/s/ Jonathan D. Karmel

Telephone: (610) 547-9556

Jonathan D. Karmel KARMEL LAW FIRM 221 N. La Salle Street, Suite 1550 Chicago, IL 60601 Telephone: (800) 459-6264

/s/ Kenneth A. Wexler

Kenneth A. Wexler Mark J. Tamblyn WEXLER WALLACE LLP 55 W. Monroe Street, Suite 3300 Chicago, IL 60603 Telephone: (312) 346-2222

Co-Counsel for Plaintiffs Paul Schaefer, Robert O'Toole, Marc Parker, Brian Jordan, Mark Jacobs, and William R. Seehafer, as trustees of the United Food & Commercial

Workers Unions & Employers Midwest

Pension Fund, on behalf of the Plan

The Clerk of Court is directed to docket this Order in case numbers 20-cv-5615, 20-cv-5817, 20-cv-7061, 20-cv-7154, 20-cv-7606, 20-cv-7842, 20-cv-7952, 20-cv-8642, 20-cv-9478, 20-cv-9479, 20-cv-9587, and 20-cv-10028.

Dated: December 22, 2020

New York, New York

SO ORDERED.

HON. KATHERINE POLK FAILLA UNITED STATES DISTRICT JUDGE

Katherin Palle Fails

Appendix A

Field Name	Sample Data	Description
FIRSTBATES	EDC0000001	First Bates number of native file document/email
LASTBATES	EDC0000001	Last Bates number of native file document/email **The LASTBATES field should be populated for single page documents/emails.
BEGATTACH	EDC0000001	First Bates number of attachment range
ENDATTACH	EDC0000015	Last Bates number of attachment range
CUSTODIAN	Smith, John	Email: Mailbox where the email resided Native: Name of the individual or department from whose files the document originated
FROM	John Smith	Email: Sender Native: Author(s) of document **semi-colon should be used to separate multiple entries
ТО	Coffman, Janice; LeeW [mailto:LeeW@MSN.com]	Recipient(s) **semi-colon should be used to separate multiple entries
СС	Frank Thompson [mailto: frank_Thompson@cdt.com]	Carbon copy recipient(s) **semi-colon should be used to separate multiple entries
BCC	John Cain	Blind carbon copy recipient(s) **semi-colon should be used to separate multiple entries
SUBJECT	Board Meeting Minutes	Email: Subject line of the email Native: Title of document (if available)

Field Name	Sample Data	Description
FILE_NAME	BoardMeetingMinutes.docx	Native: Name of the original native file, including extension
DATE_SENT	10/12/2010	Email: Date the email was sent Native: (empty)
TIME_SENT/TIME _ZONE	07:05 PM GMT	Email: Time the email was sent/ Time zone in which the emails were standardized during conversion. Native: (empty)
TIME_ZONE	GMT	The time zone in which the emails were standardized during conversion. Email: Time zone Native: (empty)
LINK	D:\001\ EDC0000001.msg	Hyperlink to the email or native file document **The linked file must be named per the FIRSTBATES number
MIME_TYPE	application/msword	The content type of an email or native file document as identified/extracted from the header
FILE_EXTEN	MSG	The file type extension representing the email or native file document; will vary depending on the format
AUTHOR	John Smith	Email: (empty) Native: Author of the document
LAST_AUTHOR	Jane Doe	Email: (empty) Native: Last Author of the document
DATE_CREATED	10/10/2010	Email: (empty) Native: Date the document was created

Field Name	Sample Data	Description
TIME_CREATED/T IME_ZONE	10:25 AM GMT	Email: (empty) Native: Time the document was created including time zone
DATE_MOD	10/12/2010	Email: (empty) Native: Date the document was last modified
TIME_MOD/TIME_ ZONE	07:00 PM GMT	Email: (empty) Native: Time the document was last modified including the time zone
DATE_ACCESSD	10/12/2010	Email: (empty) Native: Date the document was last accessed
TIME_ACCESSD/TIME_ZONE	07:00 PM GMT	Email: (empty) Native: Time the document was last accessed including the time zone
PRINTED_DATE	10/12/2010	Email: (empty) Native: Date the document was last printed
HIDDEN_CONTENT	Excel Comments; Excel Hidden Columns; Excel Hidden Worksheets	Indicates whether hidden content is present in Microsoft Excel or PowerPoint files
FILE_SIZE	5,952	Size of native file document/email in KB
PGCOUNT	1	Number of pages in native file document/email
PATH	J:\Shared\SmithJ\October Agenda.doc	Email: (empty) Native: Path where native file document was stored including original file name.
INTFILEPATH	Personal Folders\Deleted Items\Board Meeting Minutes.msg	Email: original location of email including original file name. Native: (empty)
INTMSGID	<000805c2c71b\$75977050\$cb 8306d1@MSN>	Email: Unique Message ID Native: (empty)

Field Name	Sample Data	Description
HEADER	Return-Path: <example_from@dc.edu> X- SpamCatcher-Score:1[X] Received:from[136.167.40.119] (HELO dc.edu) by fe3.dc.edu (CommuniGate Pro SMTP4.1.8) with ESMTP-TLS id 61258719 for example_to@mail.dc.edu; Mon, 23 Aug 2004 11:40:10 - 0400 Message-ID: <4129F3CA.2020509@dc.edu> Date: Mon, 23 Aug 2005 11:40:36 -400 From: Taylor Evans <example_from@dc.edu> User-Agent:Mozilla/5.0 (Windows;U; Windows NT 5.1; en-US;rv:1.0.1) Gecko/20020823 Netscape/7.0 X-Accept-Language:en-us,en MIME-Version:1.0 To: Jon Smith <example_to@mail.dc.edu> Subject:Business Development Meeting Content-Type: text/plain;charset=us-ascii; format=flowed Content-Transfer-Encoding:7bit</example_to@mail.dc.edu></example_from@dc.edu></example_from@dc.edu>	Email: The email header information Native: (empty)
MD5HASH	d131dd02c5e6eec4693d9a069 8aff95c 2fcab58712467eab4004583eb 8fb7f89	MD5 Hash value of the document.
OCRPATH	TEXT/001/EDC0000001.txt	Path to extracted text of the native file